Attachment H (Continued)

Applicable Requirements for facilities subject to 401 KAR 59:050, New storage vessels for petroleum liquids.

Pursuant to 401 KAR 59:050 Section 4 and 6, all floating roof tanks greater than 580 gallons shall comply with the following operating and testing requirements:

Operating Requirements for Floating Roof Tanks	Testing and Procedural Requirements for Floating Roof Tanks
(1) There shall be no visible holes, tears, or other opening in the seal, any seal fabric, shoe, or seal envelope. (2) All openings, except stub drains, automatic bleeder vents, rim space vents, and leg sleeves, shall be equipped with covers, lids, or seals such that: (a) The cover, lid, or seal is in the closed position at all times (i.e., no visible gap) except when in actual use or as described in 401 KAR 59:050 Section 4(3)(f); (b) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and (c) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. **(3) External and internal floating roof tanks commenced on or after May 19, 1978, and prior to July 24, 1984, shall meet the additional requirements:** (a) The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished in the minimum time necessary. (b) For each primary seal associated with an external floating roof tank the accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 sq cm/m (ten (10.0) sq in/ft) of tank diameter and the width of any portion of any gap shall not exceed 3.81 cm (one and five-tenths (1.5) in). (c) For each primary and each secondary seal associated with an external floating roof tank the accumulated area of gaps between the tank wall and the vapor-mounted primary seal or between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed twenty-one and two-tenths (21.2) sq cm/m (one and zero-tenths (1.0) sq in/ft) of tank diameter and the width of any portion of any gap shall not exceed 1.27 cm (one-half (1/2) in). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal. (d) One (1) end of the metallic shoe associated with an external floating roof tank shall extend into the stored liquid and the other end shall extend a minimum vertical distance of sixty-one (61) cm (twenty-four (24) in) above the stored liquid surface. (e) Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. (f) Each emergency roof drain associated with an external floating roof tank is to be provided with a slotted membrane fabric cover that covers at least ninety (90) percent of the area of the opening.	Compliance with the requirements prescribed in 401 KAR 59:050 Sections 3(3) and (4), and 4(3) shall be determined as follows or in accordance with an equivalent procedure as approved by the cabinet. The owner or operator of each storage vessel to which this section applies which has an external floating roof shall meet the following requirements: (1) Determine the gap areas and maximum gap widths between the primary seal and tank wall, and between the secondary seal and the tank wall according to the following frequency: (a) For primary seals, gap measurements shall be performed within sixty (60) days of the initial fill with petroleum liquid and at least once every five (5) years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished in the minimum time necessary and the secondary seal shall be replaced immediately. (b) For secondary seals, gap measurements shall be performed within sixty (60) days of the initial fill with petroleum liquid and at least once every year thereafter. (c) If any storage vessel is out of service for a period of one (1) year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of paragraphs (a) and (b) of this subsection. (d) Keep records of each gap measurement at the plant for a period of at last two (2) years following the date of measurement. Each record shall identify the vessel on which the measurement was performed and shall contain the date of the seal gap measurement, the raw data obtained in the measurement process required by 401 KAR 59:050 Section 6(2), and the calculation required by 401 KAR 59:050 Section 6(3). (e) If either the seal gap calculated in accord with 401 KAR 59:050 Section 6 (3) or the measured maximum sealed gap exceeds the limitations specified by 401 KAR 59:050 Section 4, a report shall be furnished to the secretary within sixty (60) days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of 401 KAR 59:050 Section 4. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of 401 KAR 59:050 Section 4. (2) Determine gap widths in the primary and secondary seals individually by the following procedures: (a) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports. (b) Measure seal gaps around the entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and tank wall and measure the circumferential distance of each such location. (c) The total surface area of each gap described in paragraph (b) of this subsection shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance. (3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the appropriate ratio in the standard in 401 KAR 59:050 Section 4(3)(b) and (c). (4) Provide the cabinet thirty (30) days prior notice of the gap measurement to afford the cabinet the opportunity to have an observer present.